

FIG. 1A

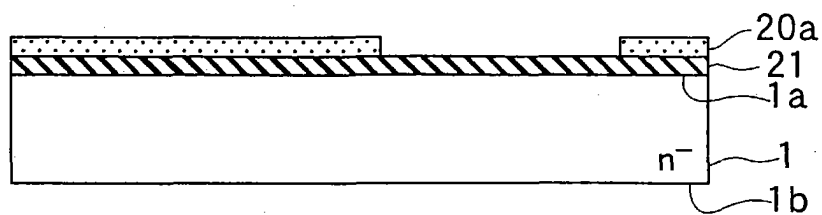


FIG. 1B

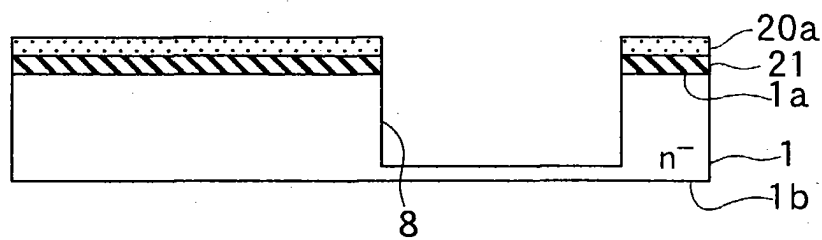


FIG. 1C

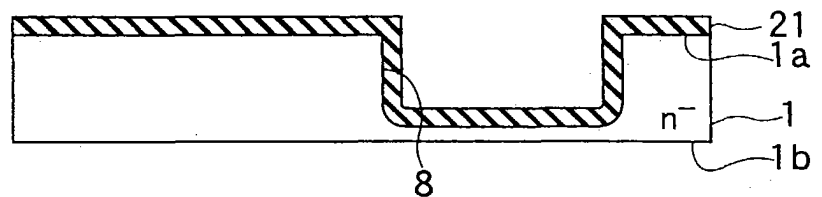


FIG. 1D

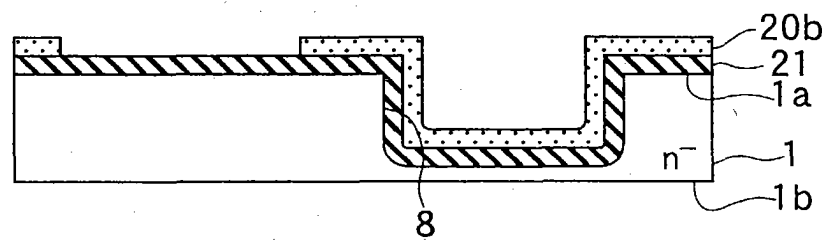


FIG. 1E

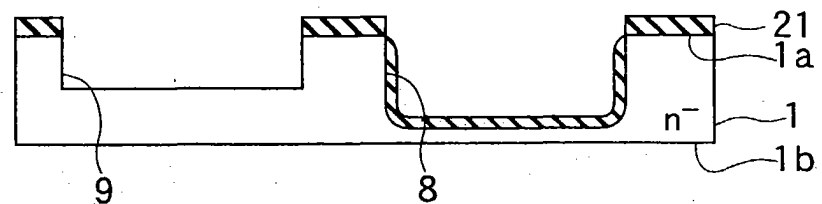


FIG. 2A

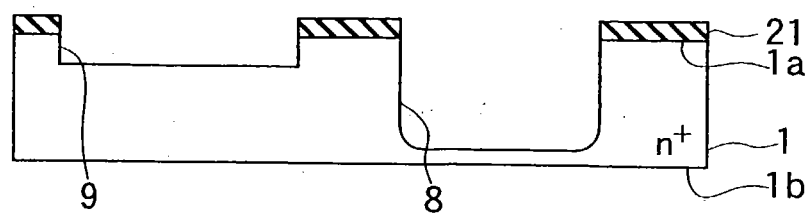


FIG. 2B

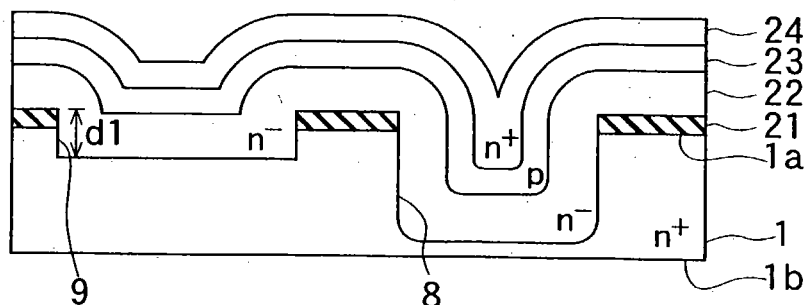


FIG. 2C

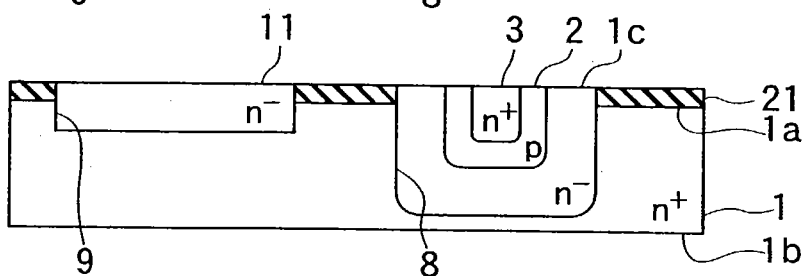


FIG. 2D

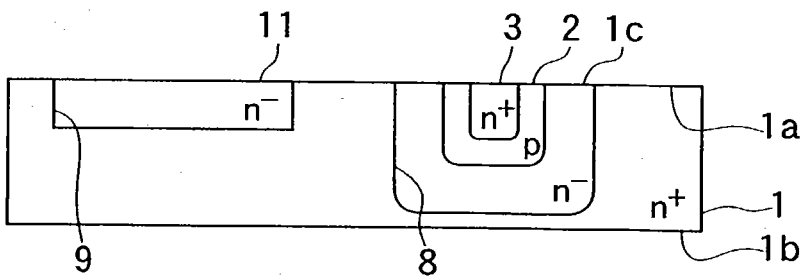


FIG. 2E

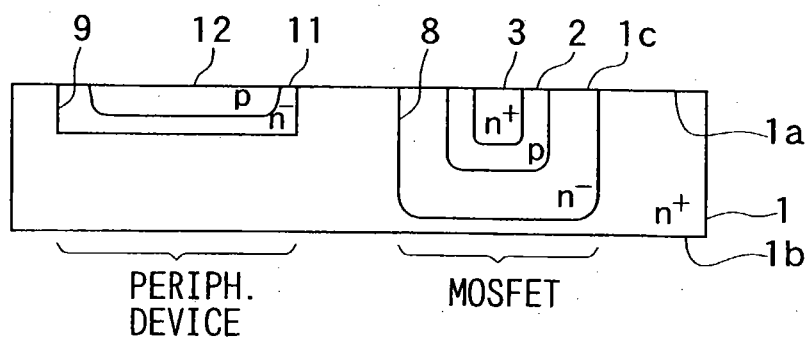


FIG. 3

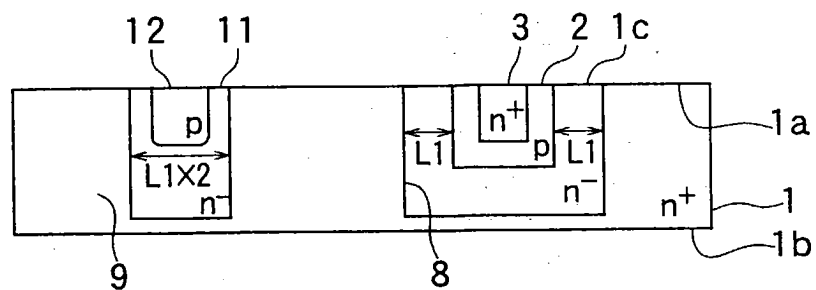


FIG. 4

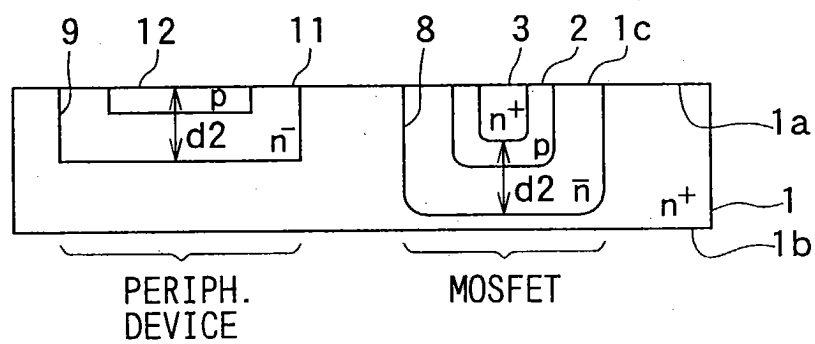


FIG. 5

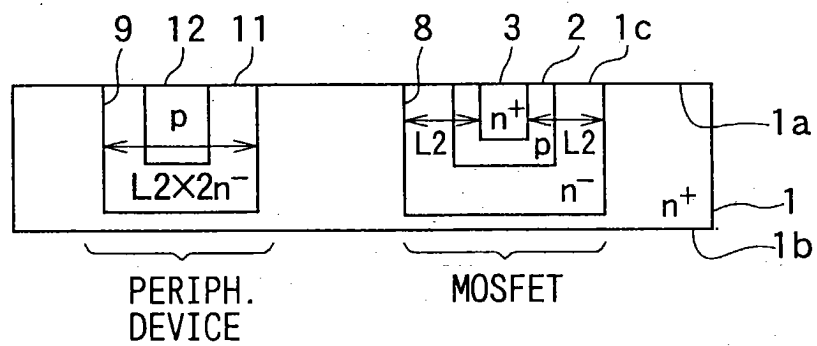


FIG. 6A

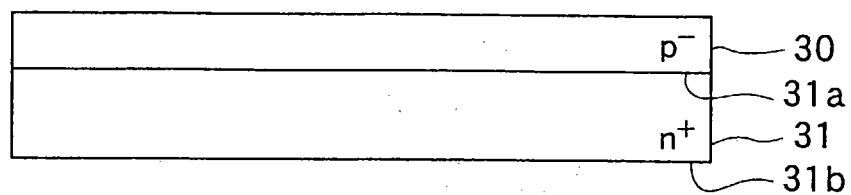


FIG. 6B

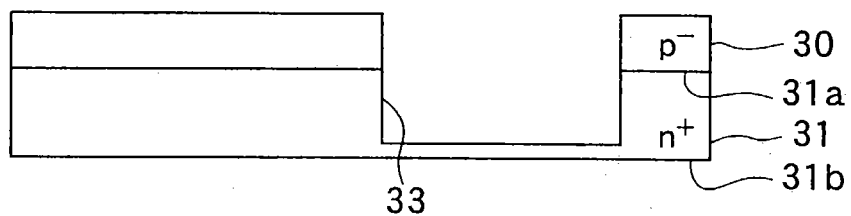


FIG. 6C

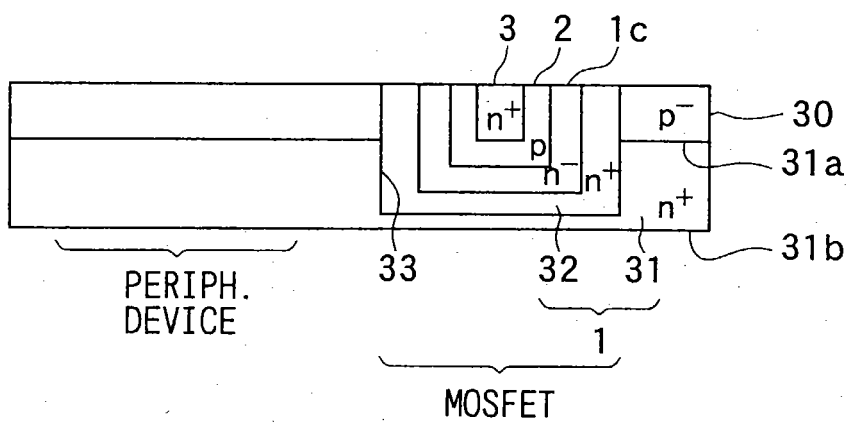


FIG. 7A

FIG. 7A is a cross-sectional view of a semiconductor device 40. The device consists of a substrate 42, which is a p-type semiconductor. A thin layer 40a is formed on the top surface of the substrate 42. A thicker layer 40b is formed on top of layer 40a. The substrate 42 is labeled with p- and n+ regions. The thin layer 40a is labeled with 40a, and the thicker layer 40b is labeled with 40b. The substrate 42 is labeled with 42.

FIG. 7B

A cross-sectional view of a semiconductor device. It features a large rectangular block on the left and a smaller, stepped block on the right. The left block has a central horizontal layer with diagonal hatching. The right block has a top layer labeled p^- , a central hatched layer, and a bottom layer labeled n^+ . A thin layer, labeled 40a, is on top of the n^+ layer. A horizontal line, labeled 45, connects the right side of the left block to the bottom of the right block. On the right side of the right block, there are labels 40b, 40, and 41 pointing to different layers. On the far right, there are labels 42, 41, 40a, 40, and 40b pointing to the various layers of the right block.

FIG. 7C

This cross-sectional view shows a semiconductor device with two main regions: a peripheral device on the left and a MOSFET on the right. The peripheral device consists of a substrate with a thin layer 44 on top. The MOSFET region includes a substrate with a thin layer 45 on top. A gate stack 3 is formed on the substrate, with a gate 2 and a gate cap 1c. The gate stack is surrounded by a p-type region 40 and n-type regions 41 and 42. The MOSFET is labeled 1, and the peripheral device is labeled PERIPH. DEVICE.

FIG. 8

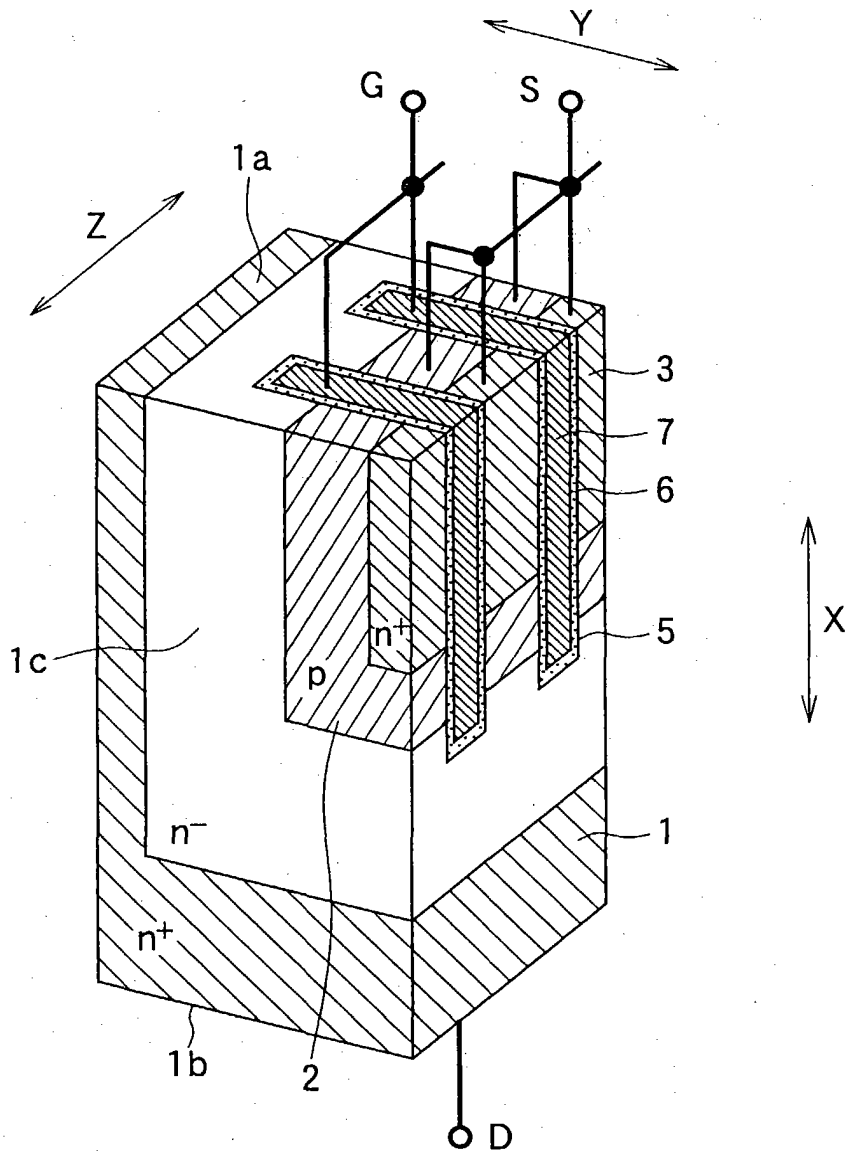


FIG. 9

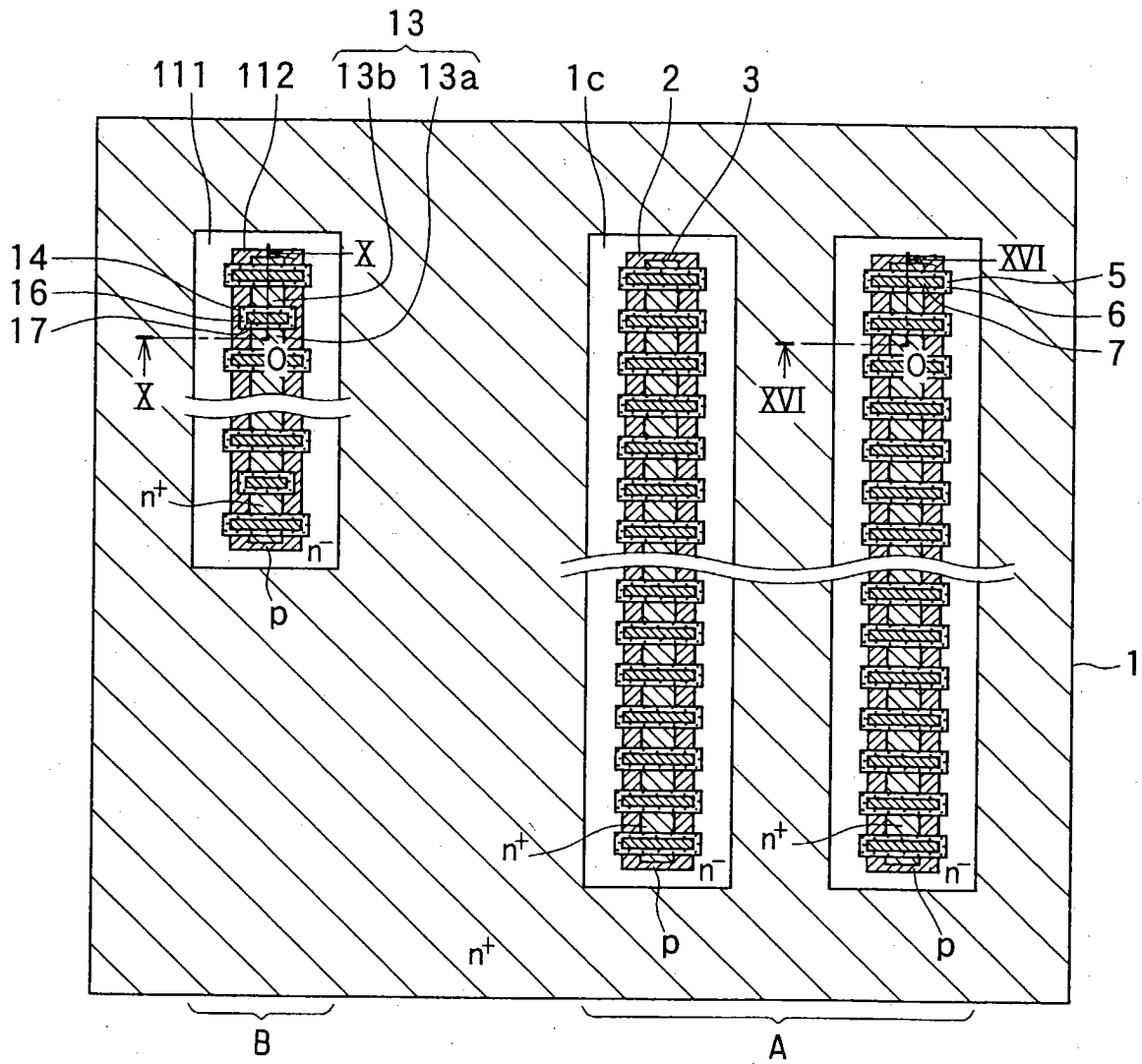


FIG. 10

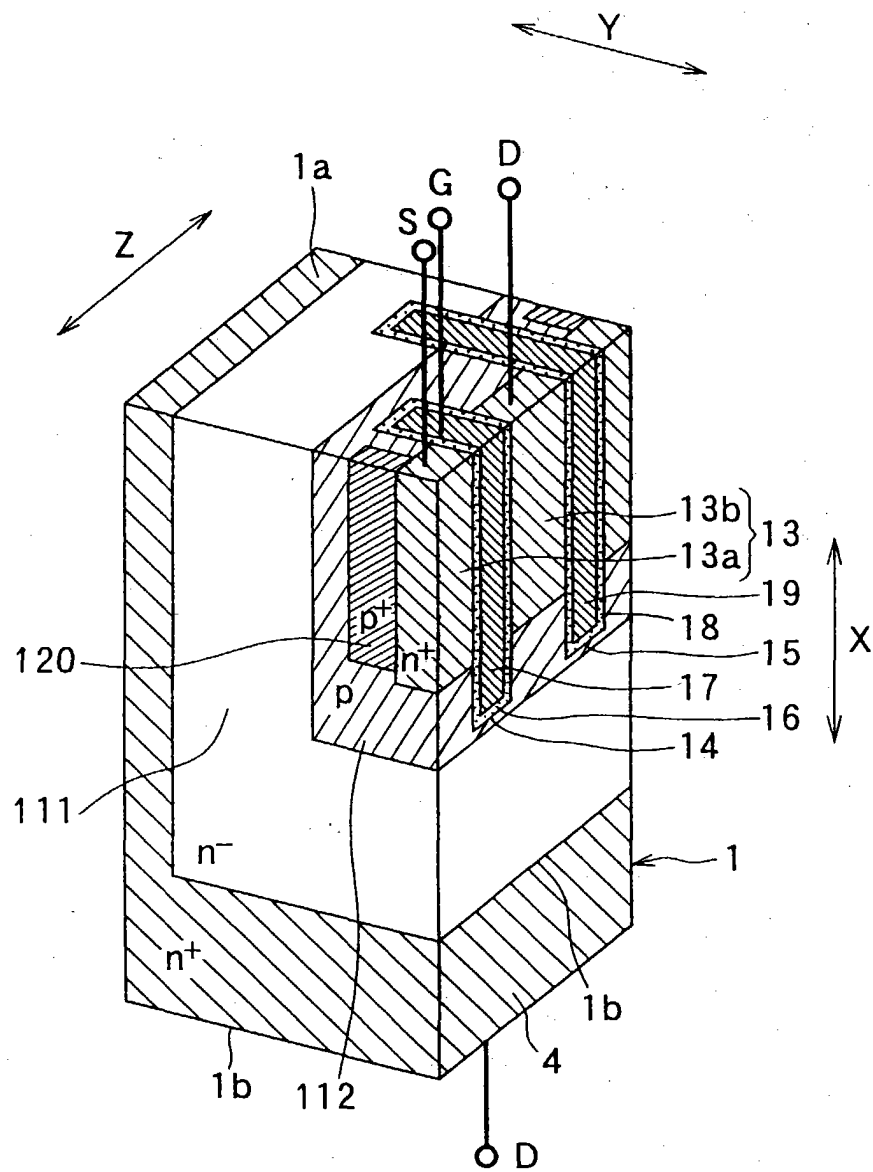


FIG. 11

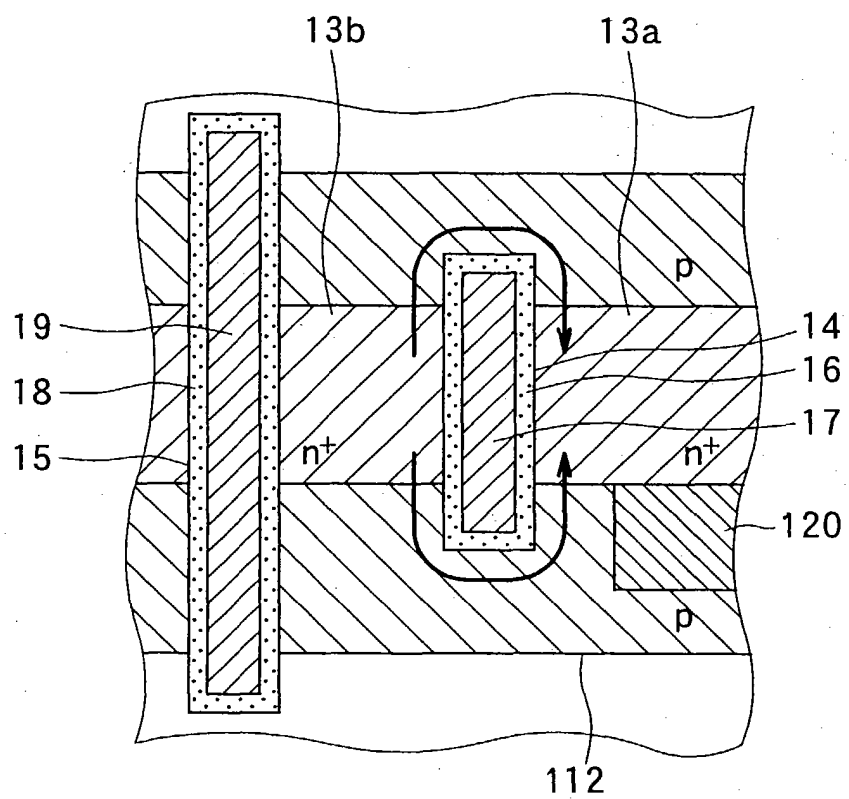


FIG. 12

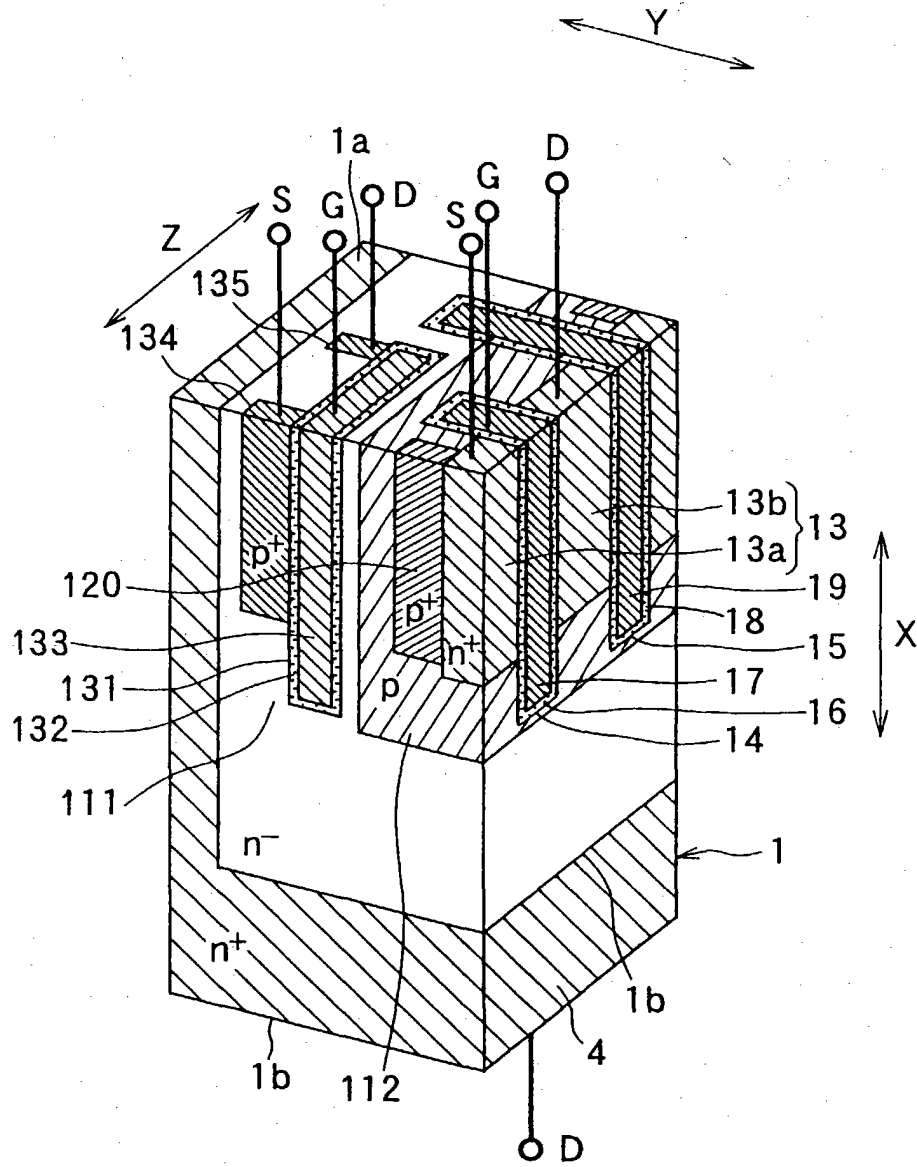


FIG. 13

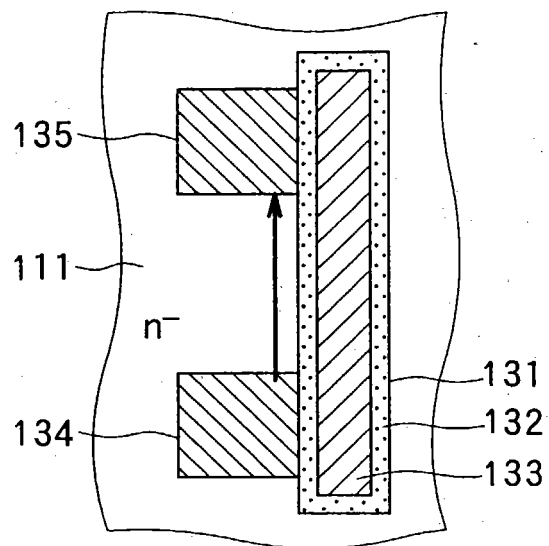


FIG. 14

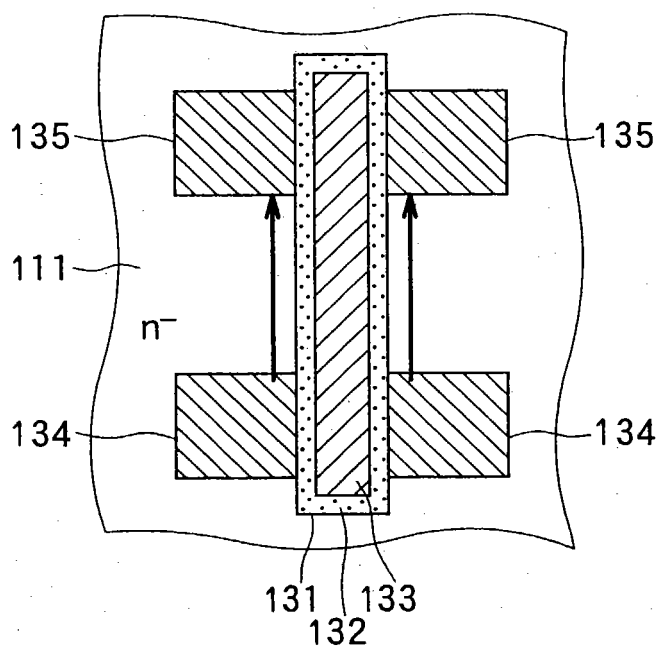


FIG. 15

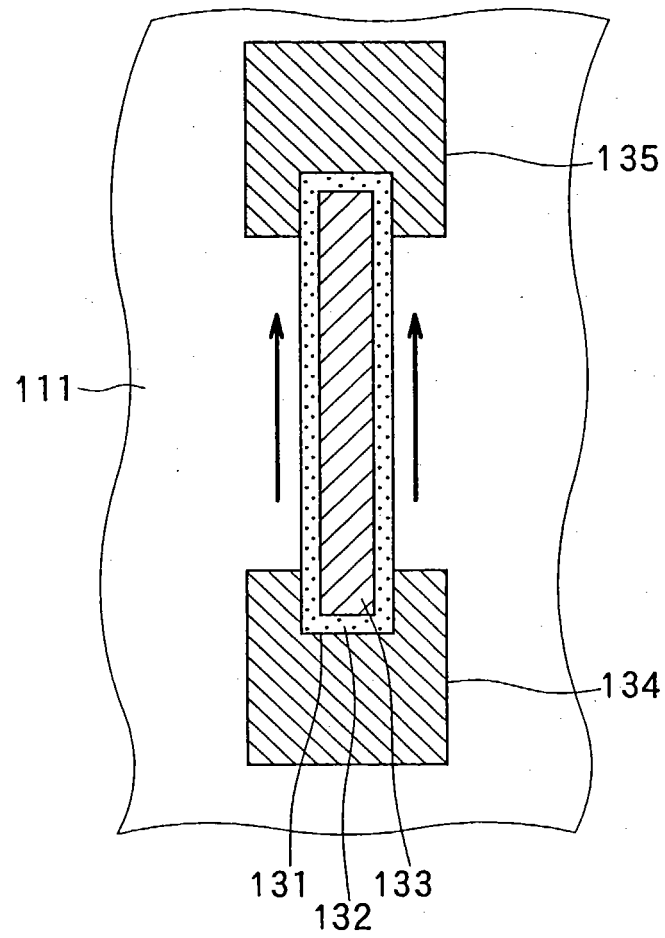


FIG. 16

